ABSTRACT

The present invention is a method for producing a single crystal in accordance with Czochralski method by flowing an inert gas downward in a chamber 1 of a single crystal-pulling apparatus 11 and surrounding a single crystal 3 pulled from a raw material melt 2 with a gas flow-guide cylinder 4, wherein when a single crystal within N region outside OSF region generated in a ring shape in the radial direction of the single crystal is pulled, the single crystal within N region is pulled in a condition that flow amount of the inert gas between the single crystal and the gas flow-guide cylinder is 0.6 D(L/min) or more and pressure in the chamber is 0.6 D(hPa) or less, in which D (mm) is a diameter of the single crystal to be pulled. It is preferable that there is used the gas flow-guide cylinder that Fe concentration is 0.05 ppm or less, at least, in a surface thereof. Thereby, there is provided a method for producing a single crystal, wherein in the case that a single crystal is produced by an apparatus having a gas flow-guide cylinder in accordance with CZ method, the single crystal has low defect density and Fe concentration can be suppressed to be 1×10^{10} atoms/cm^3 or less even in a peripheral part thereof.